

SCH

Swimming pool dehumidifiers



Series SCH dehumidifier are expressly designed for use in swimming pools where humidity should be closely controlled in order to guarantee optimal comfort. This series comprises four models which cover a capacity range from 57 to 124 l/24h. SCH units are designed for easy maintenance and service, each part being readily accessible and, when required, easily replaceable thus reducing service and maintenance costs.

VERSIONS

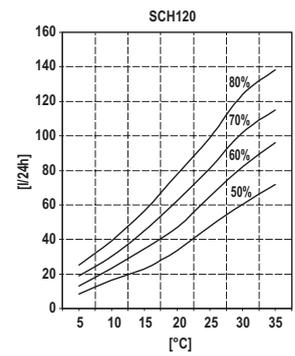
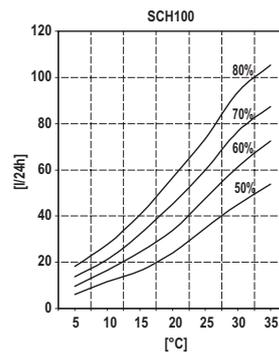
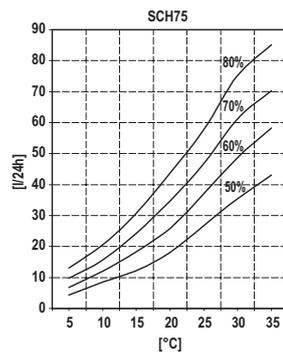
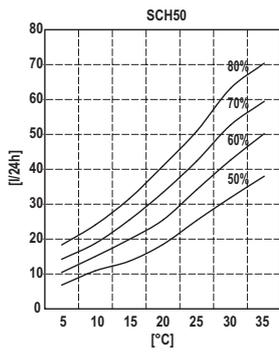
- The series includes 4 models with air flows from 600 to 850 m³/h.

ACCESSORIES

- Built in mechanical hygostat
- Remote mechanical hygostat
- Hot water coil
- Feet

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Mod.		SCH50	SCH75	SCH100	SCH120
Moisture removed ⁽¹⁾	l/24h	57	75,1	93,7	124
Nominal input power ⁽¹⁾	kW	0,9	1,45	1,7	2,2
Maximum input power ⁽²⁾	kW	1	1,6	2	2,4
Nominal input current ⁽¹⁾	A	4,9	7,3	8,5	11,3
Maximum inout current ⁽²⁾	A	5,4	7,9	9,2	12,2
Hot water coil ⁽³⁾	kW	5,4	5,4	8,6	8,6
Air flow	m ³ /h	600	600	850	850
Available static pressure	Pa	-	-	-	-
Refrigerant		R407C	R407C	R407C	R407C
Sound pressure ⁽⁴⁾	dB(A)	48	49	51	51
Temperature operating range	°C	5-36	5-36	5-36	5-36
Humidity operating range	%	50-99	50-99	50-99	50-99
Weight	Kg	52	56	78	84
Power supply	V/Ph/Hz	230/1~/50			



¹⁾ Performances refer to the following conditions: room temperature 30°C; relative humidity 80%.
²⁾ Performances refer to the following conditions: room temperature 35°C; relative humidity 80%.
³⁾ Performances refer to the following conditions: room temperature 32°C; water temperature 80/70°C.
⁴⁾ Sound pressure level measured at 1 mt from the unit in free field conditions according to ISO 3746.

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FRAME

All SCH units are made from hot-galvanized thick sheet metal, painted with polyurethane powder enamel at 180°C to ensure the best resistance against the atmospheric agents and to operate in aggressive environments. The frame is self-supporting with removable panels. A PVC drip tray is installed on all units. The colour of the unit is RAL 7035 both for the base and for the frontal panel.

REFRIGERANT CIRCUIT

The refrigerant circuit is made by using international primary brands components and according to ISO 97/23 concerning welding procedures. The refrigerant gas used in these units is R407C. The refrigerant circuit includes: filter drier, capillary tube, Schrader valves form maintenance and control, pressure safety device (according to PED regulation).

COMPRESSOR

The compressor is rotative type, with thermal overload protection by a klixon embedded in the motor winding. The compressor is mounted on rubber vibration dampers and it is supplied, standard, with sound-proof cover to reduce noise emission. The inspection is possible through the frontal panel of the unit that allows the maintenance of the compressor.

CONDENSER AND EVAPORATOR

Condensers and evaporators are made of copper pipes and aluminium fins. All evaporators are painted with epoxy powders to prevent corrosion problem due to their use in aggressive environments. The diameter of the copper pipes is 3/8" and the thickness of the aluminium fins is 0,1 mm. The tubes are mechanically expanded into the aluminium fins to improve the heat exchange factor. The geometry of these heat exchangers guarantees a low air side pressure drop and then the use of low rotation (and low noise emission) fans. All units are supplied, standard, with a PVC drip tray and all evaporators are supplied with a temperature sensor used as automatic defrost probe.

FAN

The exhaust fan is made of galvanized steel, centrifugal type, double inlet with forward curved blades. It is statically and dynamically balanced and supplied complete of the safety fan guard according to EN 294. It is mounted on the unit frame by interposition of rubber vibration dampers. The electric motors are directly connected to the fan; they are all at 3 speeds, with integrated thermal protection. The protection class of the motors is IP 54.

AIR FILTER

It is made of synthetic filtering media, ondulated type, without electro-static charge; they are all removable for differential disposal. Efficiency class G3, according to EN 779:2002.

MICROPROCESSOR

All SCH units are supplied standard with microprocessor controls. The microprocessor controls the following functions: regulation of the water temperature, antifreeze protection, compressor timing, compressor automatic starting sequence, alarm reset, potential free contact for remote general alarm, alarms and operation leds. Upon request any microprocessor can be connected to a BMS system for the remote control and management.

ELECTRIC BOX

The electric switch board is made according to electromagnetic compatibility norms CEE 73/23 and 89/336. The accessibility to the board is possible after removing the front panel of the unit and the OFF positioning of the main switch. The moisture protection degree is IP55. The following components are also standard installed: main switch, compressor fuses, compressor contactors, fan contactors. The terminal board is also supplied with voltage free contacts for remote ON-OFF.

CONTROL AND PROTECTION DEVICES

All units are supplied with the following control and protection devices: defrost thermostat, which signals to the microprocessor control that a defrost cycle is needed and controls its termination, high pressure switch with automatic reset, compressor thermal overload protection, fans thermal overload protection.

TEST

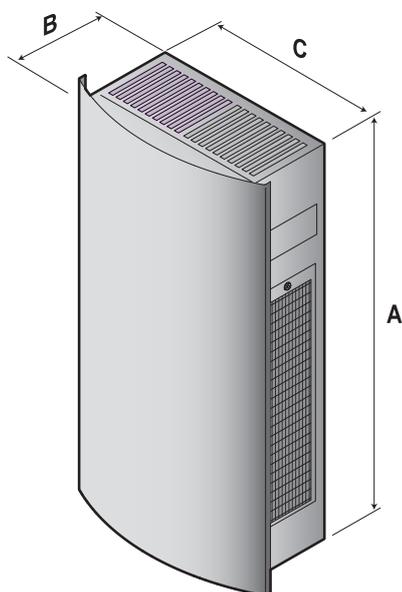
All the units are fully assembled and wired at the factory, carefully evacuated and dried after leak tests under pressure and then charged with refrigerant R407C. They are all fully operational tested before shipment. They all conform to European Directives and are individually marked with the CE label and provided with Conformity Declaration.

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Mod.	SCH50	SCH75	SCH100	SCH120
Integrated mechanical hygrostat	○	○	○	○
Remote mechanical hygrostat	○	○	○	○
Hot water coil	○	○	○	○
Feet	○	○	○	○

● Standard, ○ Optional, – Not available.

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Mod.	A (mm)	B (mm)	C (mm)
50	970	354	698
75	970	354	698
100	1350	354	698
120	1350	354	698